

THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Previously presented) A fuel composition, comprising:
from 40 to 95% by weight of a fossil fuel; and
from 60 to 5% by weight of a non-fossil solid fuel including urban solid waste, and at least a further component selected from the group consisting of elastomeric polymer materials, non-elastomeric polymer materials and mixtures thereof, wherein at least 90% by weight of the fuel composition fed into a burner is combusted in less than 10 seconds.
2. (Previously presented) A composition according to Claim 1, in which the amount of said fossil fuel is between 50 and 90% by weight.
3. (Previously presented) A composition according to Claim 1, in which the amount of the said non-fossil solid fuel is between 50 and 10% by weight.
4. (Previously presented) A composition according to Claim 1, in which the amount of said fossil fuel is between 60 and 80% by weight.
5. (Previously presented) A composition according to Claim 1, in which the amount of the said non-fossil solid fuel is between 40 and 20% by weight.

6. (Previously presented) A composition according to Claim 1, in which the fossil fuel is selected from the group consisting of methane, fuel oil, fossil coal dust, and mixtures thereof.

Claims 7 and 8. (Canceled)

9. (Previously presented) A composition according to Claim 1, in which the non-fossil solid fuel has an apparent density equal to or less than 0.6 g/cm^3 .

10. (Previously presented) A fuel composition, comprising:
from 40 to 95% by weight of a fossil fuel; and
from 60 to 5% by weight of particles less than 1 mesh in size of a non-fossil solid fuel including urban solid waste, and at least a further component selected from the group consisting of elastomeric polymer materials, non-elastomeric polymer materials, and mixtures thereof,
wherein at least 90% by weight of the fuel composition fed into a burner is combusted in less than 10 seconds.

11. (Previously presented) A composition according to Claim 10, in which at least 90% by weight of the particles are smaller than 2 mesh in size.

12. (Previously presented) A composition according to Claim 10, in which at least 50% by weight of the particles are smaller than 4 mesh in size.

13. (Previously presented) A composition according to Claim 10, in which the particles comprise non-elastomeric polymer material of less than 5 mm in size.

14. (Previously presented) A composition according to Claim 10, in which the amount of said fossil fuel is between 50 and 90% by weight.

15. (Previously presented) A composition according to Claim 10, in which the amount of said non-fossil solid fuel is between 50 and 10% by weight.

16. (Previously presented) A composition according to Claim 10, in which the amount of said fossil fuel is between 60 and 80% by weight.

17. (Previously presented) A composition according to Claim 10, in which the amount of said non-fossil solid fuel is between 40 and 20% by weight.

18. (Previously presented) A composition according to Claim 10, in which the fossil fuel is selected from a group consisting of methane, fuel oil, fossil coal dust and mixtures thereof.

Claims 19-22. (Canceled)

23. (Previously presented) A combustion method comprising the steps of:

feeding the flame of a burner of an instantaneous-combustion boiler with a flow of fuel composition including:

from 40 to 95% by weight of an instantaneously combusting fossil fuel; and

from 60 to 5% by weight of a non-fossil solid fuel made of urban solid waste and one or more other materials selected from the group consisting of elastomeric polymer materials, non-elastomeric polymer materials, and mixtures thereof, which has been suitably treated so as to be instantaneously combustible;

combusting at least 90% by weight of said fuel composition fed into the burner in less than 10 seconds.

24. (Previously presented) A combustion method according to Claim 23, in which the said non-fossil solid fuel consists of particles less than 1 mesh in size.

25. (Previously presented) A combustion method according to Claim 24, in which at least 90% by weight of said particles are less than 2 mesh in size.

26. (Previously presented) A combustion method according to Claim 24, in which at least 50% by weight of said particles are less than 4 mesh in size.

27. (Previously presented) A combustion method according to Claim 23, in which said particles comprise elastomeric polymer particles of less than 5 mm in size.

28. (Previously presented) A combustion method according to Claim 23, in which the instantaneously combusting fossil fuel is selected from a group consisting of methane, fuel oil, fossil coal dust, and mixtures thereof.

Claims 29-33. (Canceled)

34. (Previously presented) A combustion method comprising the steps of:

feeding a fuel composition into a zone of a boiler, said zone having a predetermined temperature value and said fuel composition including:

at least one instantaneously combusting fossil fuel, and

at least one instantaneously combusting non-fossil fuel selected from the group consisting of urban solid waste, elastomeric polymer materials, non-elastomeric polymer materials, and mixtures thereof;

combusting said fuel composition in said boiler, and

generating an amount of heavy ash from said combustion step,

wherein said predetermined temperature value is selected so that non-combusted materials are contained in said amount of heavy ash in an amount of less than 50% by weight.

35. (Previously presented) A combustion method according to Claim 34, in which said zone of the boiler into which said non-fossil fuel is fed has a temperature of not less than 1500°C.

36. (Previously presented) A combustion method comprising the steps of:

feeding a boiler with a fuel composition including:

an instantaneously combusting fossil fuel, and

an instantaneously combusting non-fossil fuel selected from the group consisting of urban solid waste, elastomeric polymer materials, non-elastomeric polymer materials, and mixtures thereof,

combusting said fuel composition in said boiler,

generating an amount of heavy ash from said combustion step,

wherein said non-fossil fuel has a predetermined particle size so that non-combusted materials are contained in said amount of heavy ash in an amount of less than 50% by weight.

37. (Currently amended) A system for combusting, comprising: plant
~~for combusting~~

a fuel composition comprising at least one instantaneously combusting fossil fuel, and at least one instantaneously combusting non-fossil fuel selected from the group consisting of urban solid waste, elastomeric polymer materials, non-elastomeric polymer materials, and mixtures thereof, ~~said plant comprising:~~

a boiler having at least one burner,

a system for supplying said at least one burner with a flow of said at least one instantaneously combusting fossil fuel carried by a carrier fluid, and

a system for feeding said at least one instantaneously combusting non-fossil solid fuel into said flow.

Claims 38-42. (Canceled)

43. (Currently amended) A system for combusting, comprising: ~~plant for combusting~~

a fuel composition comprising at least one instantaneously combusting fossil fuel, and at least one instantaneously combusting non-fossil fuel selected from the group consisting of urban solid waste, elastomeric polymer materials, non-elastomeric polymer materials, and mixtures thereof, ~~said plant comprising:~~

a boiler comprising at least one burner and at least one fire area,

a system for supplying the fire area of said boiler with a flow of said at least one instantaneously combusting fossil fuel carried by a carrier fluid, and

a system for conveying said at least one instantaneously combusting non-fossil fuel into the fire area of said boiler.